

A B S T R A C T

A single-substrate heat-processing apparatus (2) for a semiconductor processing system includes a process container (4) configured to accommodate a target substrate (W). A support member (6) is disposed in the process container (4) and configured to support the target substrate (W) substantially in a horizontal state, while a bottom surface of the target substrate is exposed. A heating gas supply section (20) is disposed to generate a heating gas and supply the heating gas toward the bottom surface of the target substrate (W). A distribution member (16) is disposed within a flow passage of the heating gas supplied from the heating gas supply section (20), and configured to improve distribution uniformity of the heating gas onto the bottom surface of the target substrate (W).